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EXAMINER	
SISSON, BRADLEY L	

ART UNIT	PAPER NUMBER
1634	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,297	TOCQUE ET AL.	
	Examiner	Art Unit	
	Bradley L. Sisson	1634	

-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-36,39 and 42-45* is/are pending in the application.

4a) Of the above claim(s) *43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-36,39,42,44 and 45* is/are rejected.

7)☒ Claim(s) *44 and 45* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

2. A claim that depends from a dependent claim should not be separated by any claim, which does not also depend from said dependent claim. In the present case newly added claims 44 and 45 are separated from their respective independent claims by a plurality of other independent claims. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Specification

3. The specification is objected to as documents have been improperly incorporated by reference. It is noted with particularity that the instant disclosure makes reference to various foreign patent document, both published and unpublished, as well as non-patent publications which are in turn being relied upon for disclosing how the claimed invention is to be made and used. In support of this position, attention is directed to page 17, lines 15-17; page 18, lines 17-24; page 19, lines 17-19; page 20, lines 11-14; and page 28, lines 12-14. It is noted with particularity that page 17, lines 15-17, teaches that one is to employ the method disclosed in an unpublished international patent application; and that hybridization is to be "advantageously

carried out...according to the method described by Miller and Riblet (NAR 23 (1995) 2339)"

(page 18, ll. 20-24). Also, page 28, second paragraph, states in part:

> These hybridizations are carried out according to methods familiar to those skilled in the art (in particular, consult the hybridization conditions set forth in application No. PCT/FR99/00547). (Emphasis added)

Such language fails to specify what specific information applicant seeks to incorporate by reference and just where that specific information is to be found in each of the cited documents.

As set forth in *Advanced Display Systems Inc. v. Kent State University* (Fed. Cir. 2000) 54 USPQ2d at 1679:

> Incorporation by reference provides a method for integrating material from various documents into a host document--a patent or printed publication in an anticipation determination--by citing such material in a manner that makes it clear that the material is effectively part of the host document as if it were explicitly contained therein. *See General Elec. Co. v. Brenner*, 407 F.2d 1258, 1261-62, 159 USQP 335, 337 (D.C. Cir. 1968); *In re Lund*, 376 F.2d 982, 989, 153 USPQ 625, 631 (CCPA 1967). **To incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents.** *See In re Seversky*, 474 F.2d 671, 674, 177 USPQ 144, 146 (CCPA 1973) (providing that incorporation by reference requires a statement "clearly identifying the subject matter which is incorporated and where it is to be found"); *In re Saunders*, 444 F.2d 599, 602-02, 170 USPQ 213, 216-17 (CPA 1971) (reasoning that a rejection or anticipation is appropriate only if one reference "expressly incorporates a particular part" of another reference); *National Latex Prods. Co. v. Sun Rubber Co.*, 274 F.2d 224, 230, 123 USPQ 279, 283 (6th Cir. 1959) (requiring a specific reference to material in an earlier application in order to have that material considered a part of a later application); *cf. Lund*, 376 F.2d at 989, 13 USPQ at 631 (holding that **a one sentence reference to an abandoned application is not sufficient to incorporate from the abandoned application into a new application**). (Emphasis added.)

4. Attention is also directed to MPEP 608.01(p)I, which, in pertinent part, is reproduced below:

> Mere reference to another application, patent, or publication is not an incorporation of anything therein into the application containing such reference for the purpose of the disclosure required by 35 U.S.C. 112, first paragraph. In re de Seversky, 474 F.2d 671, 177 USPQ 144 (CCPA 1973). In addition to other requirements for an application, the

> referencing application should include an identification of the referenced patent, application, or publication. Particular attention should be directed to specific portions of the referenced document where the subject matter being incorporated may be found. (Emphasis added)

5. Accordingly, the cited documents are not considered to have been properly incorporated by reference and as such, have not been considered with any effect towards their fulfilling, either in part or in whole, the enablement, written description, or best mode requirements of 35 USC 112, first paragraph.

Response to argument

6. Applicant's representative, at page 8 of their response assert that the documents "are cited merely to guide the skilled artisan to methods an techniques that can be sued in addition to the methods of the present invention." Said representative asserts further that it is not necessary to incorporate by reference the cited documents in order to satisfy the requirements under 35 USC 112, first paragraph.

7. The above arguments have been fully considered and have not been found persuasive towards the withdrawal of the objection. As presented above, the specification clearly contains statements that have been interpreted as directing one to documents in order to practice various aspects of the claimed invention, including one such method that applicant describes as being particularly "advantageous." Such language is construed as being a direction to a best mode, yet the document has not been properly incorporated by reference. While applicant's representative asserts that one skilled in the art does not need to resort to these cited documents in order to practice the claimed invention, the specification has not been found to provide an adequate description, nor enabling disclosure without same. Accordingly, and in the absence of convincing evidence to the contrary, the objection to the specification is maintained.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 27-36, 39, 42, 44, and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Attention is directed to the decision in *University of Rochester v. G.D. Searle & Co.* 68 USPQ2D 1424 (Fed. Cir. 2004) at 1428:

> To satisfy the written-description requirement, the specification must describe every element of the claimed invention in sufficient detail so that one of ordinary skill in the art would recognize that the inventor possessed the claimed invention at the time of filing. Vas-Cath, 935 F.3d at 1563; see also Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572 [41 USPQ2d 1961] (Fed. Cir. 1997) (patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention"); In re Gosteli, 872 F.2d 1008, 1012 [10 USPQ2d 1614] (Fed. Cir. 1989) ("the description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed"). Thus, an applicant complies with the written-description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." Lockwood, 107 F.3d at 1572.

10. For convenience, claims 27, 34, 35, and 42 the only independent claims currently under consideration before the Office, are reproduced below.

27. (Currently Amended) A method ~~process~~ for the detection *in vitro* of the presence of a pathological condition in a mammalian subject, said method comprising (i) providing a sample of blood cells from the subject, wherein said blood cells comprise lymphocytes, macrophages, monocytes or dendritic cells, (ii) preparing nucleic acid molecules ~~acids~~ from the sample, and (iii) hybridizing all or part of the nucleic acid molecules ~~acids~~ so prepared with at least one nucleic acid library in order to obtain a hybridization profile, the nucleic acid library comprising a plurality of nucleic acid molecules ~~clones~~ specific for differentially spliced gene products present in mammalian blood cells from the same species as said subject, wherein said blood cells comprise lymphocytes, macrophages, monocytes, or dendritic cells exposed to or experiencing a pathological condition ~~specific for splicing forms of genes, the splicing forms being characteristic of blood cells in said pathological condition~~, the hybridization profile indicating the presence of ~~blood cells in the sample characteristic of the pathological condition, thereby detecting the presence of~~ said pathological condition in said subject.

34. (Currently Amended) A method for detecting, *in vitro*, mammalian ~~process of detection *in vitro* of~~ blood cells exposed to or experiencing ~~characteristic of the presence of~~ a pathological condition, said method comprising (i) providing a sample of blood cells from a mammalian ~~the~~ subject, wherein said blood cells comprise lymphocytes, macrophages, monocytes or dendritic cells, (ii) preparing nucleic acid molecules ~~acids~~ from the sample and (iii)

hybridizing all or part of the nucleic acid molecules ~~acids~~ so prepared with at least one nucleic acid library in order to obtain a hybridization profile, the nucleic acid library comprising a plurality of nucleic acid molecules ~~clones~~ specific for differentially spliced gene products present in mammalian blood cells from the same species as said subject, wherein said blood cells comprise lymphocytes, macrophages, monocytes, or dendritic cells exposed to or experiencing said pathological condition ~~specific for splicing forms of genes, the splicing forms being characteristic of blood cells in said pathological condition~~, the hybridization profile indicating the presence of blood cells in the sample exposed to or experiencing ~~characteristic of~~ the pathological condition.

35. (Currently Amended) A method of preparing ~~process of preparation of~~ a nucleic acid library characteristic of a pathological condition in a mammalian subject, ~~wherein~~ said method comprising ~~process comprises~~ (i) obtaining a first nucleic acid preparation from blood cells isolated from a mammalian subject ~~an organism~~ presenting a pathology, said blood cells comprising lymphocytes, macrophages, monocytes or dendritic cells, (ii) obtaining a reference nucleic acid preparation from blood cells isolated from a mammalian subject of the same species ~~an organism~~ not presenting said pathology, (iii) hybridizing said first preparation and said reference preparation, and (iv) recovering, from the hybrids formed in (iii), a library of nucleic acid molecules characteristic of said pathological condition in a mammalian subject, wherein said library comprises differentially spliced gene products present in a mammalian subject having said pathological condition ~~acids characteristic of blood cells from the organism in a pathological condition~~.

42. (Currently Amended) A ~~The~~ kit ~~usable for the implementation of a process according to claim 27,~~ comprising a nucleic acid library, wherein said library comprises, deposited on a support, a plurality of nucleic acid molecules specific for differentially spliced gene products present in a mammalian blood cell selected from a lymphocyte, a macrophage, a monocyte, and a dendritic cell exposed to or experiencing a pathological condition ~~comprising nucleic acids specific for splicing forms of genes characteristic of blood cells from an organism in a pathological situation~~.

11. For purposes of examination, the claimed methods as well as claimed kit that is to comprise at lest one library of nucleic acids, have been interpreted as encompassing virtually any pathological condition, as well as any degree of exposure to a pathological condition. Said "exposure" has been construed as encompassing, but not limited to, having the cells of an individual, e.g., a health care provider, coming into direct or indirect contact with an individual that has a pathological condition. Said "pathological condition" has also been construed as encompassing diseases of unknown etiology, as well as an individual being in the same general environment (e.g., a room) where a pathological agent (virus, bacteria, fungi, amoeba, helminth, carcinogen, etc.) is also to be found wherein aid pathological agent is capable of causing a disease. Said "pathological condition" has also been construed as encompass exposure to UV light normally associated with sunlight.

12. In accordance with same methods, one is to have both a 'sample" and a "reference preparation." It is not necessary, or even possible that any and all pathological conditions in any mammal are the result of spliced genes, yet the method fairly encompasses the detection of any and all pathological conditions based upon a hybridization profile with a "library" of undefined

quantity. While the library has been further defined such that it is to comprise "a plurality of nucleic acid molecules specific for differentially spliced gene products present in mammalian blood cells from the same species as said subject," the specification fails to provide an adequate written description of how one is to draw any conclusion when the pathological condition is not associated with any gene splicing event in any blood cell, but is the result of a condition found in non-blood cells, e.g., basal cell carcinoma, HSV infection (of neurons).

13. Assuming *arguendo*, that if the claims were to be limited to the detection of blood-based pathological conditions, the instant rejection would still be maintained as the specification fails to provide an adequate written description of just what profiles are to be associated with which pathological condition(s) in any and all mammalians. It is noted with particularity that it is not enough that one be able to detect spliced gene products for such would not lead to the detection of specific disease(s) in any mammal. Rather, the skilled artisan is to translate the findings of one or and infinite number of spliced gene products findings to any and all possible pathological conditions in any and all mammalians, be they human, equine, porcine, ovine, marsupials, bats, monotremes, whales, etc. Clearly, the specification has not provided an adequate written description of which spliced gene products are associated with which disease(s), much less how one is to interpret a hybridization profile of same.

14. The specification fails to provide an adequate written description of the libraries encompassed by claim 42. It is noted with particularity that claim 42 is not drawn to a method of making a kit, but rather, the kit per se. Accordingly, the specification must provide an adequate written description of the infinite number of libraries of differentially spliced gene products for any and all mammals. While page 20 of the specification asserts that nucleic acid banks

(libraries) can comprise 10 to 50,000 clones, the specification does not provide an adequate written description of any of these clones. It appears that applicant is replying upon obviousness to satisfy the written description requirement of 35 USC 112, first paragraph. It would appear that applicant is attempting to satisfy the written description requirement of 35 USC 112, first paragraph, through obviousness. Obviousness, however, cannot be relied upon for satisfaction of the written description requirement. In support of this position, attention is directed to the decision in *University of California v. Eli Lilly and Co.* (Fed. Cir. 1997) 43 USPQ2d at 1405, citing *Lockwood v. American Airlines Inc.* (Fed. Cir. 1997) 41 USPQ2d at 1966:

> Recently, we held that a description which renders obvious a claimed invention is not sufficient to satisfy the written description requirement of that invention.

A review of the disclosure, however, fails to locate such a description that reasonably suggests that applicant, at the time of filing, had possession of such kits.

15. Claims 35, 36, 39, and 45 as noted above, are drawn to a method whereby "a nucleic acid library characteristic of a pathological condition" is prepared. As noted above, the "pathological condition" has been interpreted as encompassing any pathological condition in any mammal, be it human, rodent, ovine, porcine, bovine, marsupial, monotremes, whale, bat, etc. Said "pathological condition" is not required or limited to that which is known and/or even associated with any one or more genes in any respect. In particular, the "pathological condition" may well be that of a localized infection, yet the nucleic acid clones produced in accordance with the recited method steps is derived from blood cells of an organism. Similarly, the nucleic acid isolated for the "reference" as well as the nucleic acid isolated from the "organism" presenting pathology are both taken from blood cells. The specification does not provide an adequate written description of how nucleic acid from blood cells is indicative of pathological conditions

that arise out of a localized infection or a somatic mutation elsewhere (e.g., basal cell carcinoma). Further, the specification dos not provide an adequate written description as to how normal/control/reference nucleic acid that hybridizes to complementary sequences from the "organism presenting a pathology" are to in fact be "characteristic of a pathological condition" when by definition they are the equivalent of the reference nucleic acid of an organism not presenting the pathology (claim 36).

16. As presented above, the "pathological condition" need not be known, or even indirectly associated with genes of the organism. The specification does not provide an adequate written description of how one is to determine if an organism is manifesting a previously unknown pathological condition, or is to be considered eligible for being a source of "reference nucleic acid preparation," when one does not know how to recognize the pathological condition which in fact is being demonstrated.

17. The specification has not provided an adequate written description as to how such evolutionary diverse organisms, including those for which it would be impossible for them to demonstrate the pathological condition, are to be selected and utilized as a source for reference nucleic acids.

18. For the above reasons, and in the absence of convincing evidence to the contrary, claims 27-36, 39, 42, 44, and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Response to argument

19. At page 10 of the response applicant's representative asserts that claims drawn to a library have been cancelled (noting the cancellation of claims 40 and 41). However, claim 42,

drawn to a kit that comprises such a library is still pending. The very issues that affect the satisfaction of a library of nucleic acids is not different when it is defined as being part of a kit, as both are products, which comprise the same elements.

20. At pages 11-12, applicant's representative provides a review of the standard of written description requirements, however, it is not readily apparent how the instant disclosure satisfies the full requirements so noted. At pages 13-15 a re view of the invention is provided. It is noted that at page 15 that the following conclusion is provided:

> "Applicant's invention yields a much higher amount of data with fewer preparations and further allows for a more complex analysis of the test sample."

As an initial matter, the above conclusion has not been found to be supported by any showing, be it data presented in the specification or via sworn declaration. Attention is directed to MPEP 2145.

> Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art.
> The arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

Even if evidence supporting the conclusion were provided, which it was not, the argument is unpersuasive as to how the instant disclosure, at the time of filing, satisfies the written description requirement. Such a requirement is independent as to whether the invention provides more, less, or the same amount of data, and without regard to what amount of preparation is needed.

21. At page 15 applicant's representative asserts, "Neither procedure (i.e., the preparation of the nucleic acid molecules or their hybridization) requires anything more than routine skill in the art." Such conclusory remarks have not been found persuasive towards the withdrawal of the written description rejection as 1) they are unsupported by any showing; and 2) the ease or difficulty of practicing an invention does not lessen the requirement for a full, clear, and concise written description of the claimed invention.

22. At page 15, last paragraph, applicant's representative asserts:

> Because differentially spliced gene products are associated with various pathological conditions and methods of their preparation are known in the art, as is discussed below, one skilled in the art can easily prepare or select specific nucleic acid molecules based upon knowledge in the art of nucleic acids sequences that correspond to differentially spliced exons, introns, or junction regions of a gene that are altered in a cell experiencing a pathological condition, e.g., a disease or disorder.

23. The above argument has been fully considered and has not been found persuasive towards the withdrawal of the rejection for in the case of claims 27-34 and 44, as the specification fails to provide an adequate written description of the relevant differentially spliced genes, their associated hybridization profiles, and how these correlate to any mammalian pathological condition is critical to practicing the claimed invention. Knowledge of one without the other will not result in the claimed invention. The specification dos not provide an adequate written description of the essential starting materials, much less any indication of how the skilled artisan is to blindly identify not only the pathological condition and where it is specifically located in the individual. In the present case, the sample may be derived from blood collected from a puncture of an ear lobe, and the individual may be a geriatric patient with basal cell carcinoma, a gangrenous toe and infected decubitus ulcer. The specification is essentially silent

as to how any of these pathological conditions would be detected by the claimed method, much less identify their respective positions on the patient using nothing more than a hybridization profile.

Applicant's representative, at page 16 of he response, asserts:

> It is important to note that what is required to practice Applicant's invention (and correspondingly, what the inventors need to have conceptually at the time of filing) is the understanding that the nucleic acid molecules forming the library (which are specific for a pathological condition), once identified, can be used to determine the presence of a pathological condition in a mammalian subject by virtue of the same gene splicing variants in a test sample from the mammalian subject, which results in the hybridization of nucleic acid molecules derived from blood cells of a mammalian test subject with nucleic acid molecules present in the nucleic acid library. *A priori* knowledge of the actual nucleic acid sequence of either the library or the test sample Is not necessary.

24. While agreement is reached in that one may knot need to know the nucleotide sequence of the nucleic acids that comprise the test sample or the reference, one sill must have knowledge of what the differentially spliced genes are, and their respective hybridization profiles so to practice the claimed invention. The specification has not provided an adequate written description of either, much less both. To assert that all the starting materials, hybridization profiles, etc., are within the skill level of the ordinary artisan speaks not to applicant having satisfied the written description requirement, but rather a reliance on obviousness to satisfy the written description requirement of 35 USC 112, first paragraph. Obviousness, however, cannot be relied upon for satisfaction of the written description requirement. In support of this position, attention is directed to the decision in *University of California v. Eli Lilly and Co.* (Fed. Cir. 1997) 43 USPQ2d at 1405, citing *Lockwood v. American Airlines Inc.* (Fed. Cir. 1997) 41 USPQ2d at 1966:

> Recently, we held that a description which renders obvious a claimed invention is not sufficient to satisfy the written description requirement of that invention.

25. Acknowledgement is made of applicant's representative's admission at page 17 that: "Applicants' invention is not the discovery of the nucleic acids molecules specific for the pathological condition per se, rather, it is the discovery of the sue of those nucleic acid molecules in detection methods" (emphasis in the original). Acknowledgement is also made of applicant's remarks at page 22-23, and the accompanying Exhibit A, comprising "100 representative abstracts" of differentially spliced genes for use in a nucleic acid library that are known in the art, and that "the genus of nucleic acid molecules recited in present claims 27-36, 39, and 42 for use as the 'library' would have been known to the skilled artisan at the time of filing the present application and obtaining these nucleic acid molecules would not have been new or unconventional in the art." See rejection under 35 USC 103(a), infra.

26. Even with the showing provided by Exhibit A as to the known existence of differentially spliced genes, the specification fails to provide an adequate written description of any of any hybridization profiles for any one mammal, much less any and all possible mammals.

27. At page 19 of the response applicant's representative asserts that the specification teaches how nucleic acid library may be prepared.

28. The above argument has been fully considered and has not been found persuasive as claims 27-34 (unlike claim 35) are not drawn to the preparation of a nucleic acid library, but rather, to its usage. Accordingly, the library is an essential starting material required for the practice of the invention. A review of the disclosure fails to locate an adequate written description of said libraries, which as seen in claim 42, are claimed outright.

29. For the above reasons, and in the absence of convincing evidence to the contrary, claims 27-36, 39, 42, 44, and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Double Patenting

30. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

31. Claims 27-36, 39, 42-45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,372,432 B1 (Tocque et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to both methods of detection of a pathological conditions and kits.

Response to argument

32. Applicant's representative, at page 9 of the response, asserts, "Applicants will submit a terminal disclaimer, if necessary, to overcome the rejection once otherwise allowable subject matter has been determined."

33. In view of the above rejection of claims, and the absence of any specific traversal of the rejection, the rejection of claims 27-36, 39, 42-45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,372,432 B1 (Tocque et al.) is maintained.

Claim Rejections - 35 USC § 103

34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

36. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

37. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's representative admissions in the response of 28 October 2004.

Applicant's representative admits at page 17 that: "Applicants' invention is not the discovery of the nucleic acids molecules specific for the pathological condition per se, rather, it is the discovery of the sue of those nucleic acid molecules in detection methods" (emphasis in the original). Applicant's representative further asserts at page 22-23, and the accompanying Exhibit A, comprising "100 representative abstracts" of differentially spliced genes for use in a nucleic acid library that are known in the art, and that "the genus of nucleic acid molecules recited in present claims 27-36, 39, and 42 for use as the 'library' would have been known to the skilled artisan at the time of filing the present application and obtaining these nucleic acid molecules would not have been new or unconventional in the art."

In view of the foregoing admission by Applicant's representative as to what constitute the invention of applicant, claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's representative admissions in the response of 28 October 2004.

Conclusion

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

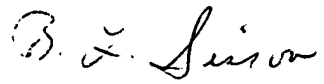
39. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley L. Sisson whose telephone number is (571) 272-0751. The examiner can normally be reached on 6:30 a.m. to 5 p.m., Monday through Thursday.

41. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on (571) 272-0745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

42. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bradley L. Sisson
Primary Examiner
Art Unit 1634

BLS
19January 2005